

इंटरनेट

मानक

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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 5568 (1978): Dimensions for tenons and cross-slots for tools with taper bore 1:30 [PGD 32: Cutting tools]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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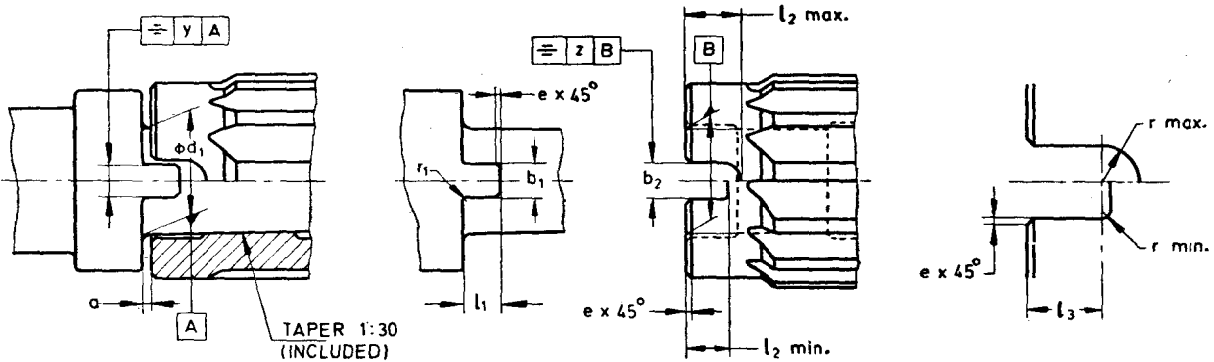
Indian Standard

DIMENSIONS FOR TENONS AND CROSS-SLOTS WITH TAPER BORE 1 : 30

(First Revision)

1. Scope — Covers the dimensions for tenons and cross-slots for tools with taper bore 1 : 30.

2. Dimensions



All dimensions in millimetres.

Arbor						Tool						e†		a‡	
d ₁	b ₁ h12	l ₁ h12	r ₁ Max	y Max	b ₂ * H13	l ₂		r		l ₃	z Max	Basic	Tol	Min	Max
						Min	Max	Min	Max						
10	4	4.6	0.3	0.15	4.3	5.4	7.0	0.6	2.15	4.8	0.15	0.3	+ 0.1 0	0.3	1.2
13	4	4.6	0.3		4.3	5.4	7.0	0.6	2.15	4.8		0.3		0.3	1.4
16	5	5.6	0.4		5.4	6.2	8.3	0.6	2.70	5.6		0.4		0.3	1.4
19	6	6.7	0.5	0.20	6.4	7.8	10.2	0.8	3.20	7.0	0.20	0.5	+ 0.2 0	0.4	1.7
22	7	7.7			7.4	8.6	11.3	1.0	3.70	7.6		0.5			
27	8	8.8	0.6		8.4	9.3	12.5	1.0	4.20	8.3		0.6		0.5	2.2
32	10	9.8			10.4	10.5	14.5	1.2	5.20	9.3		0.6		0.5	2.2
40	12	11.0			12.4	11.2	16.2	1.2	6.20	10.0		0.6		0.5	2.2
50	14	12.0	0.8		14.4	13.1	18.7	1.6	7.20	11.5	0.8	0.5		2.2	

*The width b_2 of the slot shall be parallel over the length l_3 .

†Chamfers can be replaced by radii of the same value and tolerance.

‡The limits on the clearance a between the mouth of the tool and the reference plane (locating face) towards the large end of the mating taper bore, are derived from the tolerances on diameter d_1 of the tool taper bore and of the taper portion towards the large end diameter of the arbor. These tolerances are determined by the values of a_1 and a_2 given in Table 1.

3. Tolerances

3.1 Tolerances on Diameter d_1 of the Taper Bore in the Tool — The tolerance is determined by the amount of permissible variation a_1 in the position of the gauge plane of the taper bore. The value a_1 represents the depth to which taper plug gauge of the appropriate nominal size may enter the reamer to be checked with respect to its gauge line (see Table 1).

3.2 Tolerance on Diameter d_1 of the Arbor Large End Diameter — The tolerance is determined by the amount of the permissible variation a_2 in the position of the gauge plane on the body of the arbor. The value a_2 represents the permissible distance between the leading face of a taper ring gauge of the appropriate nominal size and the reference plane (locating face) of the arbor to be checked (see Table 1).

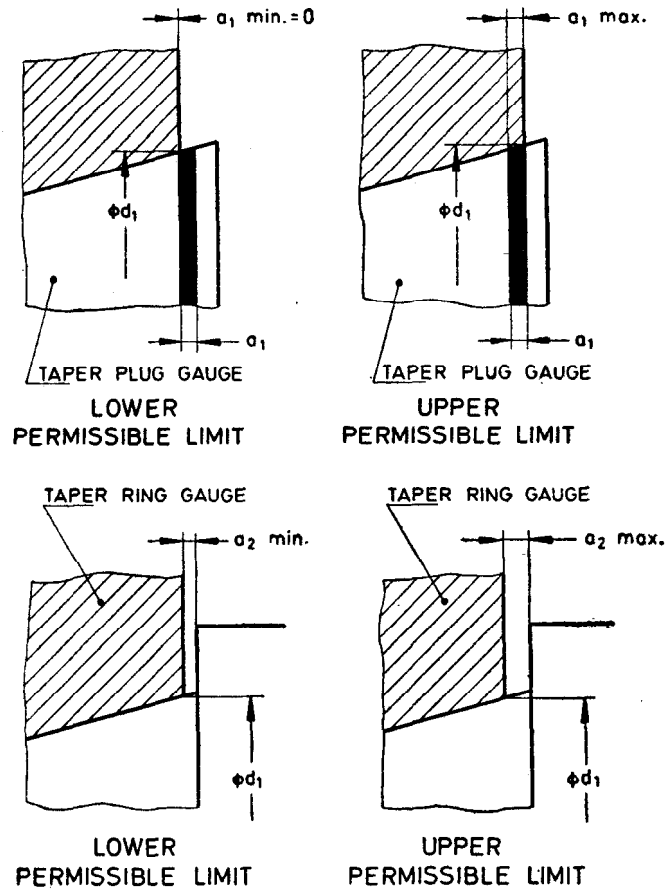
Adopted 24 November 1978

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TABLE 1 VALUES OF a_1 and a_2
(Clauses 3.1 and 3.2)



All dimensions in millimetres.

d_1	Tool a_1		Arbor a_2	
	Min	Max	Min	Max
10	0	0.5	0.8	1.2
13		0.6	0.9	1.4
16		0.7	1.1	1.7
19				
22				
27		0.9	1.4	2.2
32				
40				
50				

EXPLANATORY NOTE

This Standard was first published in 1970. This revision has been taken up to bring it in line with the work done at ISO level. In the preparation of this standard, considerable assistance has been derived from ISO 2402-1972 'Shell reamers with taper bore (taper bore 1 : 30 included) with slot drive and arbors for shell reamers' issued by the International Organization for Standardization.